

□□□□□□□□ -- □□□□□□□□□□□□

11/11

[illegible]

1949 leukotomy

[illegible][illegible]

[3]

leukotomy

Leukotomy BRIAN Initiative

Leukotomy □□□□□□□□□□

1 personalities mental diseases personalities
BRAIN Initiative [4]

2 leukotomy leukotomy BRAIN Initiative AlphaGo

3 personality intelligence Walter Freeman personality intelligence [5]

personality intelligence personality intelligence

leukotomy

Turing Test Nature AlphaGo Zero superhuman

superhuman 比 generic 比 human 更胜一筹
更胜一筹

Leukotomy 发表在 Nature 比 AlphaGo Zero 更胜 superhuman 更胜
更胜 peer review 更胜 Peer review 更胜 [6]

比 leukotomy 更胜 BRAIN Initiative 更胜

比 Technological Singularity 比 AlphaGo 更胜

Nature 更胜 AlphaGo Zero 更胜 AlphaGo Zero 更胜 superhuman 比 performance
superhuman 比 generic 比 human 更胜 superhuman 更胜

AlphaGo Zero 比 AlphaGo Master 更胜 superhuman 更胜
更胜 generic 比 superhuman 更胜 game 更胜
更胜

更胜 AlphaGo Zero 更胜 superhuman 更胜
更胜 AlphaGo Zero 更胜

更胜 AlphaGo Zero 比 Nature 更胜 superhuman 更胜

更胜
更胜

更胜 game 更胜
superhuman 更胜

更胜

更胜 Technological Singularity 更胜

更胜 Deepmind 更胜
更胜 [7] 更胜

AlphaGo Master 更胜 AlphaGo Master 更胜 AlphaGo Master 更胜
更胜 AlphaGo Zero 比 AlphaGo Master 更胜 AlphaGo Master
更胜

更胜 AlphaGo Zero 更胜 AlphaGo Master 更胜 AlphaGo Zero 更胜 [8] 更胜
更胜 AlphaGo Master 更胜 16 更胜 AlphaGo Zero 更胜 18 更胜
AlphaGo Zero 更胜 14 比 16 更胜 45 更胜

1 比 Nature Magazine 更胜 AlphaGo 更胜 Deepmind 更胜 AlphaGo Zero
比 AlphaGo Master 更胜

2) 更胜 AlphaGo Zero 更胜 local trap 更胜

AlphaGo Zero 超human 能力

AlphaGo Zero AlphaGo Master AlphaGo Master [9]Nature AlphaGo Zero AlphaGo Master deep-learning AlphaGo Master

AlphaGo Zero [10] superhuman AlphaGo Zero

AlphaGo generic human Deepmind AlphaGo AlphaGo AlphaGo

AlphaGo AlphaGo [11]

Turing Machine AlphaGo AlphaGo Zero AlphaGo Master AlphaGo Zero AlphaGo Zero

[12]

Turing Machine Turing Machine Universal approximation

intergrity [13]

1 2 [14]

Socratic method

Karl Popper [15]

Neurosciences and human specific intelligence
Neurosciences and human specific intelligence

Neurosciences and human specific intelligence
Neurosciences and human specific intelligence

Alan Turing, Geoffrey Hinton, Demis Hassabis
AlphaGo

Demis Hassabis, deep-learning, reinforcement learning [16]
Nature, AlphaGo Zero, generic, superhuman
Geoffrey

Turing Machine, Geoffrey Hinton, Turing Machine, Alan Turing

Dialogue Concerning the Two Chief World Systems [17]

The Sceptical of Chemist

On the Origin of Species

On the Origin of Species

human specific intelligence, big data, BRAIN Initiative, big data, human specific intelligence

Big data, AlphaGo

AlphaGo

AlphaGo

AlphaGo

AlphaGo

AlphaGo

□ human specific intelligence □ Technological Singularity □ “□” □ [20]


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Leukotomy Turing Test AI A Modern Approach Wind Tunnel
approach Technological Singularity “Aristotle... was the first to formulate a precise set of laws governing the rational
part of the mind.”(On page 5)
Zero superhuman Galileo Galilei Dialogue Concerning the Two Chief World Systems Immanuel Kant Gödel's theorems

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~~~~~ Technological Singularity  
AlphaGo Zero superhuman [24]

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[1] AI A Modern Approach

“Aristotle... was the first to formulate a precise set of laws governing the rational  
part of the mind.”(On page 5)

Galileo Galilei Dialogue Concerning the Two Chief World Systems

Immanuel Kant

Gödel's theorems

“a precise set of laws governing the  
rational part of the mind”

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~~~~~ Turing Test

[2]

[illegible]

BRAIN Initiative □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ mental diseases□□□□ anxiety disorders like depression and post-traumatic stress disorder□obesity and eating disorders□bipolar disorder□and mental retardation □□□ □□ disorders □□□ diseases□□□□□□

[5] Leucotomy in England and Wales, 1942-1954 9284 41 28 25 2 4

leucotomy


□□□□ one third would improve □ one-third remained the same□□□□□□□□□□ clinical condition□□□□ personality □ intelligence □□□□□

[illegible]

AlphaGo Zero superhuman generic human  
AlphaGo Zero

[7] 碁盤 Cracking Go 碁盤 Deep Blue 碁盤 AlphaGo 碁盤 AlphaGo 碁盤



[15] 

[23] 

